

# Értekezések

## Atópiás dermatitis gyermekkorban: prevalencia, provokáló tényezők, költségteher\*

Harangi Ferenc<sup>1</sup>, Sebők Béla<sup>2</sup>

<sup>1</sup> Tolna Megyei Önkormányzat Balassa János Kórháza, Gyermekosztály

<sup>2</sup> Dorozsmai és Társa Egészségügyi Bt., Pécs

### Összefoglalás

Az elmúlt években az atópiás dermatitis prevalenciája kifejezetten emelkedett az ún. jóléti államokban, ami arra utal, hogy a fejlett országokban kialakult életvitel és életmód hatással van a börtünetek megjelenésére. A szerzők kérdőív segítségével meghatározták a betegség prevalenciáját; a Baranya megyei házi gyermekorvosok részvételével komplex felmérést végeztek a betegek családi és lakóhelyi környezetére, táplálkozására vonatkozóan; vizsgálták a betegek *Staphylococcus aureus* kolonizációja és a *staphylococcus* szuperantigének közötti összefüggés jelentőségét a betegség etiolójában; feltárták és összehasonlították az extrinsic- és intrinsic-típusú atópiás dermatitises betegek epidemiológiai, klinikai és immunológiai jellemzőit; tisztázták a gyermekkorú atópiás dermatitis családra gyakorolt hatását és költségvetését.

**kulcsszavak:** atópiás dermatitis, prevalencia, provokáló tényezők, extrinsic-típus, intrinsic-típus, költségteher

### Summary

#### Atopic dermatitis in childhood: prevalence, triggering factors, financial burdens

The prevalence of atopic dermatitis has increased in the so-called welfare states in the past decades and literature suggest possible impact of the changing way of life and standard of living on the appearance of skin symptoms. The authors investigated the prevalence of atopic dermatitis in school children by means of questionnaires; by active participation of primary care paediatricians in Baranya County, a complex study was undertaken in order to investigate the characteristics of the family and home environment of children suffering from atopic dermatitis. The association between the pronounced *Staphylococcus aureus* colonisation of the skin and nasal cavity in atopic dermatitis patients as well as staphylococcal superantigens in the etiology of the disease was also investigated; the epidemiological, clinical and immunological features of the extrinsic-type and intrinsic-type atopic dermatitis was surveyed and compared; the impact of atopic dermatitis on families was estimated, the economic burden of caring for children with atopic dermatitis in Hungary was also assessed.

**keywords:** atopic dermatitis, prevalence, triggering factors, extrinsic-type, intrinsic-type, financial burdens

## Irodalom

1. Schultz Larsen F, Hanifi JM. Secular change in the occurrence of atopic dermatitis. *Acta Derm Venereol (Stockh)* **1992**; 72: (Suppl. 176) 7-12.
2. Dotterud LK, Kvammen B, Lund E. és mtsai. Prevalence and some clinical aspects of atopic dermatitis in the community of Sor-Varenger. *Acta Derm Venereol (Stockh)* **1995**; 75: 50-53.
3. Dotterud LK, Odland JO, Falk ES. Atopic diseases among schoolchildren in Nikel, Russia, an arctic area with heavy air pollution. *Acta Derm Venereol* **2001**; 81: 198-201.
4. Kay J, Gawkroger DJ, Mortimer MJ és mtsai. The prevalence of childhood atopic eczema in a general population. *J Am Acad Dermatol* **1994**; 30: 35-39.
5. Laughter D, Istvan JA, Tofte SJ és mtsai. The prevalence of atopic dermatitis in Oregon schoolchildren. *J Am Acad Dermatol* **2000**; 43: 649-655.
6. Schultz Larsen F, Diepgen T, Svensson A. The occurrence of atopic dermatitis in North Europe: an international questionnaire study. *J Am Acad Dermatol* **1996**; 34: 760-764.
7. Siguara H, Umemoto N, Deguchi H és mtsai. Prevalence of childhood and adolescent atopic dermatitis in a Japanese population: comparison with the disease frequency examined 20 years ago. *Acta Derm Venereol (Stockh)* **1998**; 78: 293-294.
8. Tay Y-K, Kong K-H, Khoo L és mtsai. The prevalence and descriptive epidemiology of atopic dermatitis in Singapore schoolchildren. *Br J Dermatol* **2002**; 146: 101-106.
9. Williams H, Robertson C, Stewart A és mtsai. Worldwide variations in the prevalence of symptoms of atopic eczema in the international study of asthma and allergies in childhood. *J Allerg Clin Immunol* **1999**; 103: 125-138.
10. Yura A, Shimizu T. Trends in the prevalence of atopic dermatitis on school children: longitudinal study in Osaka Prefecture, Japan, from 1985 to 1997. *Br J Dermatol* **2001**; 145: 966-973.
11. Harangi F, Hartmann A, Lörinczy K és mtsai. Atópiás dermatitis előfordulási gyakorisága Baranya megyei iskolás gyermekek körében. *Orv Hetil* **2003**; 144: 429-433.
12. Kuhnyár Á, Hunyadi J, Kóska L, Szabó I. Az atópiás dermatitis előfordulási gyakoriságának vizsgálata a Szabolcs-Szatmár-Bereg megyében élő 19 évnél idősebb lakosok körében. *Gyermekgyógyászat* **2005**; 56: 419-425.
13. Harris JM, Cullinan P, Williams HC és mtsai. Environmental associations with eczema in early life. *Br J Dermatol* **2001**; 144: 795-802.
14. Ruiz RG, Kemeny DM, Price JF. Higher risk of infantile atopic dermatitis from maternal atopy than from paternal atopy. *Clin Exp Allergy* **1992**; 22: 719-723.
15. Strom K, Abeck D. Atopisches Ekzem. In: Traupe H, Hamm H. Hrsg *Pädiatrische Dermatologie*. Springer Verlag Berlin, Heidelberg. **1999**; 417-433.
16. Tariq SM, Matthews SM, Hakim EA és mtsai. The prevalence of and the risk factor birth cohort study. *J Allerg Clin Immunol* **1998**; 101: 587-593.
17. Matricardi PM, Rosmini F, Ferrigno L és mtsai. Cross sectional retrospective study of prevalence of atopy among Italian military students with antibodies against hepatitis A virus. *Br Med J* **1997**; 314: 999-1003.
18. Shaheen SO, Aaby P, Hall AJ és mtsai. Measles and atopy in GuineaBissau. *Lancet* **1996**; 347: 1792-1796.
19. Strachan DP. Hay fever, hygiene and household size. *Br Med J* **1989**; 299: 1259-1260.
20. Riedler J, Braun-Fahrlander C, Eder W és mtsai. Exposure to farming in early life and development of asthma and allergy: a cross-sectional survey. *Lancet* **2001**; 358: 1129-1133.
21. Ashida Y, Ogo M, Denda M. Epidermal interleukin-1 alfa generation is amplified at low humidity: implications for the pathogenesis of inflammatory dermatoses. *Br J Dermatol* **2001**; 144: 238-243.
22. McNally NJ, Williams HC, Phillips DR. Atopic eczema and the home environment. *Br J Dermatol* **2001**; 145: 730-736.
23. Rothe MJ, Grant-Kels JM. Continuing Medical Education. Atopic dermatitis: an update. *J Amer Acad Dermatol* **1996**; 35: 1-13.
24. Ruzicka T. Atopic eczema between rationality and irrationality. *Arch Dermatol* **1998**; 134: 1462-1469.
25. Schafet T, Dirschedl P, Kunz B, Überla K. Maternal smoking during pregnancy and lactation increases the risk for atopic eczema in the offspring. *J Am Acad Dermatol* **1997**; 36: 550-556.
26. Aly R. Bacteriology of atopic dermatitis. *Acta Derm Venereol (Stockh)* **1980**; 92(Suppl): 16-18.
27. Bunikowski R és mtsai. Evidence for a disease promoting effect of *S. aureus*-derived exotoxins in atopic dermatitis. *J Allergy Clin Immunol* **2000**; 105: 814-819.
28. Hauser C és mtsai. Staphylococcus aureus skin colonization in atopic dermatitis. *Dermatologica* **1985**; 170: 35-39.
29. Leung DYM. Atopic dermatitis: new insights and opportunities for therapeutic intervention. *J Allergy Clin Immunol* **2000**; 105: 860-876.
30. Miedzobrodzki J és mtsai. Proteolytic activity of *Staphylococcus aureus* strains isolated from the colonized skin of patients with acute-phase atopic dermatitis. *Eur J Clin Microbiol Infect Dis* **2002**; 21: 269-276.
31. Mack D és mtsai. Characterization of transposon mutants of biofilm-producing *Staphylococcus epidermidis* impaired in the accumulative phase of biofilm production: genetic identification of a hexosamine-containing polysaccharide intercellular adhesin. *Infect Immun* **1994**; 62: 3244-3253.
32. Klüken H, Wienker T, Bieber T. Atopic eczema/dermatitis syndrome – a genetically complex disease. New advances in discovering the genetic contribution. *Allergy* **2003**; 58: 5-12.
33. Schmid-Grendelmeier P, Simon D, Simon H-U és mtsai. Epidemiology, clinical features and immunology of the „intrinsic“ (non-IgE-mediated) type of atopic dermatitis (constitutional dermatitis). *Allergy* **2001**; 56: 841-849.
34. Wüthrich B. Clinical aspects, epidemiology and prognosis of atopic dermatitis. *Ann Allergy Asthma Immunol* **1999**; 83: 464-470.
35. Lapidus CS, Schwarz DF, Honig RJ. Atopic dermatitis in children: Who cares? Who pays? *J Am Acad Dermatol* **1993**; 28: 699-703.
36. Herd RM, Tidman MJ, Prescott RJ, Hunter JAA. The cost of atopic eczema. *Br J Dermatol* **1996**; 135: 20-23.
37. Su CJ, Kemp AS, Varigos GA és mtsai. Atopic eczema: its impact on the family and financial cost. *Arch Dis Child* **1997**; 76: 159-162.
38. Emerson RM, Williams HC, Allen BR. What is the cost of atopic dermatitis in preschool children? *Br J Dermatol* **2001**; 143: 514-522.
39. Ellis CN, Drake LA, Prendergarst MM és mtsai. Cost of atopic dermatitis and eczema in the United States. *J Am Acad Dermatol* **2002**; 46: 361-370.
40. Verboom P, Hakkaart-van Roijen L, Strukenboom M és mtsai. The cost of atopic dermatitis in the Netherlands: an international comparison. *Br J Dermatol* **2002**; 147: 716-724.
41. Warschburger P, Buchholz HTH, Petermann F. Psychological adjustment in parents of young children with atopic dermatitis: which factors predict parental quality of life? *Br J Dermatol* **2004**; 150: 304-311.
42. Barbeau M, Lalonde H. Burden of atopic dermatitis in Canada. *Int J Dermatol* **2006**; 45: 31-36.
43. Hanifin JM, Rajka G. Diagnostic features of atopic dermatitis. *Acta Derm Venereol (Stockh)* **1980**; 92: 44-47.
44. European Task Force on Atopic Dermatitis. Severity scoring of atopic dermatitis: the SCORAD index. *Dermatology* **1993**; 186: 23-31.
45. Stein REK, Riessman CK. The development of an Impact-on-Family Scale: preliminary findings. *Med Care* **1980**; 18: 465-472.
46. Braun-Fahrlander C, Gassner M, Grize L és mtsai. No further increase in asthma, hay fever and atopic sensitisation in adolescents living in Switzerland. *Eur Resp J* **2004**; 23: 407-413.
47. Nowak D, Suppli Ulrik C, von Mutius E. Asthma and atopy: has peak prevalence been reached? *Eur Resp J* **2004**; 23: 359-360.